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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,753	02/05/2004	Jean-Marie Koeune	DN1998203DO1	5713

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EXAMINER	
FISCHER, JUSTIN R	

ART UNIT	PAPER NUMBER
1733	

DATE MAILED: 01/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/772,753	KOEUNE ET AL.	
	Examiner	Art Unit	
	Justin R. Fischer	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *6-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-14 and 17-20* is/are rejected.

7)☒ Claim(s) *15 and 16* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *020504*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deck (US 4,287,924, of record). Deck substantially teaches the pneumatic runflat tire construction of the claimed invention, including two sidewalls 14 with shoulders, a carcass 21 comprising one or more carcass plies, a two part discontinuous ply 28 with one portion contained in each sidewall and disposed between a first and second runflat insert 20_1, 20_2, and one or more belts 23 between the tread and the carcass structure. It is further evident from the figures that the reinforcement structure in each sidewall (combination of one portion of discontinuous ply and pair of runflat inserts) extends from a location near the bead region to a location near the shoulder. While Deck fails to expressly describe or depict an innerliner, such a component represents a fundamental component of modern-day tubeless tires that is designed to retain the compressed air of a tire within the tire cavity and one of ordinary skill in the art at the time of the invention would have found it obvious to include such a layer in the tire of Deck. It is further noted that absent any depiction of a tubed tire construction (use of inner tube) in Deck, one of ordinary skill in the art at the time of the invention would have expected the tire to be a tubeless tire and include an innerliner.

As to claim 20, Figures 1 and 3 depict a tire structure in which the carcass ply 21 has a turnup end that is substantially contiguous with the main portion of said carcass ply and is positioned at a height that is substantially equal to the mid-height of the sidewall. While it is unclear if the turnup end is upward of said mid-height, such a design is extremely well known and conventional in tire design (provides increased protection in radial direction) and absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the tire of Deck in accordance to the claimed invention.

3. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mezzanotte (EP 385192, of record). Mezzanotte substantially teaches the pneumatic, runflat tire construction of the claimed invention, including a pair of textile inserts (one in each sidewall) (Column 6, Lines 25-25). In such a construction, the textile inserts bisect the entirety of the runflat inserts or lunettes 9 in each sidewall and thus define a pair of runflat inserts in each sidewall (axially inside and outside the textile insert). While Mezzanotte fails to expressly describe or depict an innerliner, such a component represents a fundamental component of modern-day tubeless tires that is designed to retain the compressed air of a tire within the tire cavity and one of ordinary skill in the art at the time of the invention would have found it obvious to include such a layer in the tire of Mezzanotte. It is further noted that absent any depiction of a tubed tire construction (use of inner tube) in Mezzanotte, one of ordinary skill in the art at the time of the invention would have expected the tire to be a tubeless tire and include an innerliner.

As to the textile insert, Mezzanotte specifically teaches that the upper end of said insert preferably projects beyond the end of the runflat insert and the lower end of said insert can extend to the upper part of the bead filler, which as depicted in Figure 1, corresponds to the lower end of the runflat insert- such a design would result in the runflat insert of Mezzanotte being bisected into an inner and outer runflat insert.

4. Claims 6-9, 11, 12, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deck and further in view of Shinto (JP 6-340209, newly cited). As noted above, Deck substantially teaches the tire of the claimed invention, including a two-part discontinuous ply in which one part or portion is in each sidewall and disposed between a pair of runflat inserts. As to the two-part discontinuous ply, Deck teaches that it is a heat-conducting sheet or layer, possibly formed of metallic cords that extend in the radial direction of the tire (Column 2, Lines 35-58). While the reference fails to suggest the use of wavy cords, Shinto similarly teaches a sidewall reinforcing layer in which the cords extend in the radial direction of the tire (analogous to that of Deck). In this instance, Shinto describes the use of wavy cords in order to provide increased protection in the thickness direction of the sidewall. Although such a benefit is not expressly disclosed as being desirable in Deck, it is clearly evident that such a benefit is desirable in nearly all tire constructions and as such, one of ordinary skill in the art at the time of the invention would have found it obvious to form the cords of Deck as wavy cords absent any conclusive showing of unexpected results.

Regarding claims 7 and 18, it appears from Figure 2 of Shinto that the cords make an angle within the broad range of the claimed invention. To form the relevant

angle in Shinto, the cord paths of adjacent parts must be extended to form a vortex. Furthermore, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed range. Thus, one of ordinary skill in the art at the time of the invention would have found it obvious to form the relevant angles of Deck in view of Shinto in accordance to the broad range of the claimed invention.

With respect to claims 8, 9, and 19, the cords of Deck are designed to provide a heat-conducting sheet and as noted above, the reference teaches the use of metallic (steel) cords.

As to claims 11 and 12, Figures 1 and 3 depict a tire structure in which the carcass ply 21 has a turnup end that is substantially contiguous with the main portion of said carcass ply and is positioned at a height that is substantially equal to the mid-height of the sidewall. While it is unclear if the turnup end is upward of said mid-height, such a design is extremely well known and conventional in tire design (provides increased protection in radial direction) and absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the tire of Deck in accordance to the claimed invention.

5. Claims 6, 7, 10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mezzanotte and further in view of Shinto. As noted above, Mezzanotte substantially teaches the tire of the claimed invention, including a two-part discontinuous ply in which one part or portion is in each sidewall and disposed between a pair of runflat inserts. While the reference fails to suggest the use of wavy cords, Shinto similarly teaches a sidewall-reinforcing layer in which the cords extend in the

radial direction of the tire (analogous to that of Mezzanotte). In this instance, Shinto describes the use of wavy cords in order to provide increased protection in the thickness direction of the sidewall. Although such a benefit is not expressly disclosed as being desirable in Mezzanotte, it is clearly evident that such a benefit is desirable in nearly all tire constructions and as such, one of ordinary skill in the art at the time of the invention would have found it obvious to form the cords of Mezzanotte as wavy cords absent any conclusive showing of unexpected results.

Regarding claims 7 and 18, it appears from Figure 2 of Shinto that the cords make an angle within the broad range of the claimed invention. To form the relevant angle in Shinto, the cord paths of adjacent parts must be extended to form a vortex. Furthermore, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed range. Thus, one of ordinary skill in the art at the time of the invention would have found it obvious to form the relevant angles of Mezzanotte in view of Shinto in accordance to the broad range of the claimed invention.

As to claim 10, Mezzanotte teaches that the insert is formed of textile reinforcement elements or cords (Column 6, Lines 4-10)- such an insert is seen to constitute a fabric in light of applicant's disclosure.

6. Claims 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mezzanotte and further in view of Hoshino (US 3,954,131, of record), Kono (JP 1-297306, of record), and Verdier (US 3,464,477, of record). In regards to the textile insert, Mezzanotte teaches an embodiment in which such an insert formed of a single ply is disposed in each sidewall of the tire. While Mezzanotte fails to describe each

insert as being formed of two plies, one of ordinary skill in the art at the time of the invention would have found it obvious to use more than a single ply since it is extremely well known to incorporate multiple cord reinforcing plies in similar tire constructions (provides increased protection and strength), as shown for example by Hoshino (Column 7, Lines 40-47), Kono (Figures 1-5), and Verdier (Figures 3 and 4, Column 2, Lines 65-68). In particular, Hoshino describes the incorporation of multiple cord reinforcing layers in a runflat tire construction in the same region as disclosed by Mezzanotte and the claimed invention. As such, one of ordinary skill in the art at the time of the invention would have found it obvious to form the respective textile inserts of Mezzanotte from two plies in view of Hoshino, Kono, and Verdier. It is additionally noted that one of ordinary skill in the art at the time of the invention would have expected the cords of the respective layers to be arranged in a crossing relationship as is well known and conventional in the tire industry (such a construction is expressly disclosed in the abstract of Kono).

Regarding claim 17, as noted above, Mezzanotte suggests that the relevant cords can be made of any convenient textile material (Column 6, Lines 36-40), it being well recognized that nylon and rayon are two of the most common textile reinforcement materials in the tire industry. Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to form the cords of Mezzanotte from either of the claimed materials.

Allowable Subject Matter

7. Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. It is noted that if applicant amends claim 13 to include claim 14 and either of the indicated allowable claims, a double patenting rejection would be applicable since the line of demarcation set forth in the original restriction requirement in the parent application would not be maintained.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Fischer

January 3, 2006